

RECEIVED
CENTRAL FAX CENTER

DEC 14 2006

10/532,144

14. (CURRENTLY AMENDED) A roller device (10) for displacing a load (1) in an essentially horizontal plane comprising at least one essentially horizontal table (21) to which roller elements (23, 24) are attached, at least one rack (31) covering said table (21) equipped with openings (32, 33) located opposite said roller elements (23, 24), said rack (31) defining a plane contact surface (S) for supporting said load when the load is static and said roller elements (23, 24) being located in a plane essentially parallel to said surface (S) and able to support said load when the load is moving, an actuating means (40) being associated with at least one of the rack ([2]) 31 and the table ([3]) 21 to be movable relative to another of the rack ([2]) 31 and the table ([3]) 21 between at least a lower position and an upper position wherein the load is supported either by the rack (31) or by the table (21), said actuating means (40) is designed to displace one of the rack ([2]) 31 and the table ([3]) 21 at least in a horizontal translation (Th), and said openings (32, 33) of the rack (31) comprises a lifting means (50) which cooperates with said roller elements (23, 24) on said table (21) have a shape compatible with a shape of the roller element (23, 24) to form lifting ramps so as to cause the one of the rack ([2]) 31 and the table ([3]) 21 to move in vertical displacement (Tv) simultaneously with the horizontal displacement (Th).

15. (CANCELED)

16. (CURRENTLY AMENDED) A roller [The] device (10) according to claim [[15]] 14, wherein for displacing a load (1) in substantially a horizontal plane comprising at least one substantially horizontal table (21) to which roller elements (23, 24) are attached, at least one rack (31) covering said table (21) equipped with openings (32, 33) located opposite said roller elements (23, 24), said rack (31) defining a plane contact surface (S) for supporting said load when the load is static and said roller elements (23, 24) being located in a plane substantially parallel to said surface (S) and able to support said load when the load is moving, an actuating mechanism (40) being associated with at least one of the rack (31) and the table (21) to be movable relative to another of the rack (31) and the table (21) between at least a lower position and an upper position;

wherein the load is supported either by the rack (31) or by the table (21), said actuating mechanism (40) displaces one of the rack (31) and the table (21) at least

12/14/06 - 10:52 AM

- 2 -

10/532,144

in a horizontal translation (Th), and said openings (32, 33) of the rack (31) have a shape compatible with a shape of the roller element (23, 24) to form lifting ramps so as to cause the one of the rack (31) and the table (21) to move in vertical displacement (Tv) simultaneously with the horizontal displacement (Th), and

the openings (32, 33) consist of orifices defining at least a first zone (32a, 33a) which allows at least tops of the roller elements (23, 24) to project, a second zone (32b, 33b) for covering the roller elements (23, 24) and an intermediate zone (32c, 33c) which together with the roller elements (23, 24) forms lifting ramps.

17. (PREVIOUSLY PRESENTED) The device according to claim 16, wherein the second zone (32b, 33b) with the openings is designed to block the roller elements (23, 24) in said openings (32, 33) on the rack (31) in order to lock in a position of said rack (31) relative to said table (21).

18. (PREVIOUSLY PRESENTED) The device according to claim 17, wherein the roller elements are spherical balls (23) and the intermediate zone (32c) with the openings (32) is generally elliptical in shape, converging toward the second zone (32b).

19. (PREVIOUSLY PRESENTED) The device according to claim 17, wherein the roller elements are bi-conical rollers (24) and the intermediate zone (33c) with the openings (33) is generally triangular in shape, converging toward the second zone (33b).

20. (PREVIOUSLY PRESENTED) The device according to claims 18, wherein the first and second zones (32a, 33a, 32b, 33b) of the openings (32, 33) have transverse dimensions ranging respectively from 60 to 95% and from 10 to 45% of the diameter of the roller elements (23, 24).

21. (PREVIOUSLY PRESENTED) The device according to claim 17, wherein the rack (31) is movable and associated with an actuation means (40) and the table (21) supporting the roller elements (23, 24) is fixed.

22. (CURRENTLY AMENDED) The device according to claim 21, wherein the actuating [[means]] mechanism (40) comprises at least one handle (41) moving in translation within a guide block (42) integral with the table (21) and oriented in an essentially perpendicular direction to the direction of horizontal displacement (Th) by the rack (31), said rack (31) comprising a guide groove (44) traversed by said

12/14/06 - 10:21 A M

10/532,144

handle (41) and angularly offset in relation to the guide block (42) so as to generate horizontal displacement of the rack (31).

23. (CURRENTLY AMENDED) The device according to claim 22, wherein the actuating ~~[[means]]~~ mechanism (40) comprises at least one locking element (45) for connecting the rack (31) to the table (21) in at least one raised or lowered position.

24. (CURRENTLY AMENDED) A load handling platform comprising at least one roller device (10) for displacing a load (1) in a generally horizontal plane comprising at least one generally horizontal table (21) to which roller elements (23, 24) are attached, at least one rack (31) covering said table (21) having openings (32, 33) located opposite said roller elements (23, 24), said rack (31) defining a plane contact surface (S) capable of supporting said load when the load is static and said roller elements (23, 24) being located in a second plane generally parallel to said surface (S) and capable of supporting said load when moving, an actuating means (40) associated with at least one of the rack (~~[[2]]~~ 31) and the table (~~[[3]]~~ 21) to be movable in relation to another of the rack (~~[[2]]~~ 31) and the table (~~[[3]]~~ 21) between at least a lower position and an upper position, the load is supported by either the rack (31) or by the table (21), actuating means (40) displaces the rack (~~[[2]]~~ 31) and the table (~~[[3]]~~ 21) at least in a horizontal translation (Th), wherein said openings (32, 33) on rack (31) comprises a lifting means (50) which cooperate with said roller elements (23, 24) on said table (21) have a shape compatible with the shape of the roller elements (23) to form lifting ramps so as to generate a vertical displacement (Tv) by the rack (~~[[2]]~~ 31) ~~[[and]]~~ or the table (~~[[3]]~~ 21) simultaneous with the horizontal displacement (Th).

25. (CANCELED)

26. (CURRENTLY AMENDED) The load handling platform according to claim ~~[[25]]~~ 24, wherein the openings (32, 33) consist of orifices defining at least a first zone (32a, 33a) that allows at least tops of the roller elements (23, 24) to project, a second zone (32b, 33b) which covers the roller elements (23, 24), and an intermediate zone (32c, 33c) which forms, in combination with the roller elements (23, 24), said lifting ramps.

1374026-1023 A.M

- 4 -